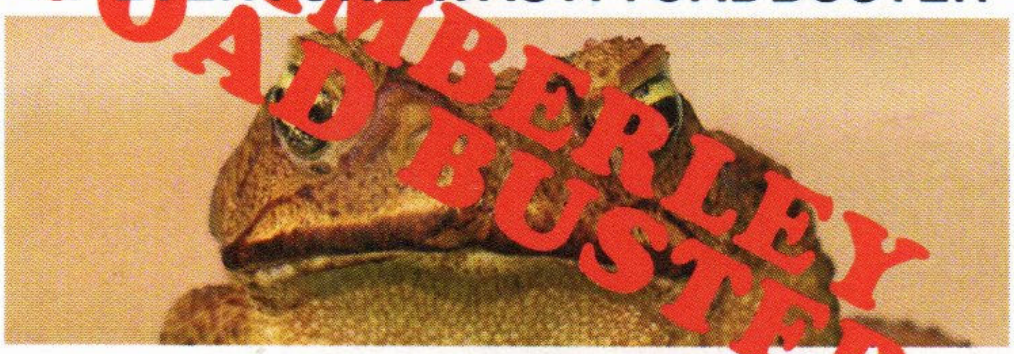
08 9168 7080

HOW TO PROTECT WILDLIFE & CONTROL CANE TOADS in YOUR BACKYARD!

"KIMBERLEY TOADBUSTERS"

IF EVERYONE WAS A TOADBUSTER



THE TOADS WOULD BE BUSTED

08 9168 7080

www.canetoads.com.au

www.thekimberleywa.com.au

admin@canetoads.com.au

Cane toads arrived in Kununurra late January 2010. It is critical everyone starts to toadbust in their own backyards one or two evenings a week. During the day look for and remove any signs of cane toad eggs, tadpoles or metamorphs.

If we are able to keep toad numbers to a minimum there is a good chance we can reduce the impact of cane toads on our wildlife.

Kimberley Toad Busters wants to monitor the impact cane toads have on our wildlife, please see our website to help.

A number of Giant Burrowing Frogs have been killed by mistake in Kununurra. Please check with a Kimberley Toad Buster if you are unsure.

Giant Burrowing Frog

HOW TO IDENTIFY A CANE TOAD

- Poison gland behind ear drum. Not found on native frogs.
- Distinct bony ridge above eyes and meets at nose. Not found on native frogs.
- Rough and bumpy skin, usually dry and leathery. Native frogs skin is moist and smooth.
- Male cane toads have rough bumps along back, like sandpaper. Female toads are larger and skin is smoother.
- Cane toads do not have suckers on fingers or toes.
- Unique mall call, can be heard up to 5 km away. Listen online at www.canetoads.com.au.

TADPOLES are black with a short thin tail that looks 'like it has been stuck on.' Large number of tadpoles and 'flock' together when they are disturbed.

EGGS small and black, found in long strings of transparent jelly. They can begin breaking down within 13 hrs.

METAMORPHS and JUVINILES are visible during the day near waters edge or nearby shade. In uncontrolled areas can cover the ground like a moving carpet. Look for ridge from eyes to nose, careful as they can be easily mistaken for native frogs.

How YOU can CONTROL CANE TOADS in your BACKYARD

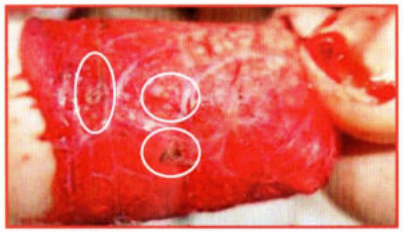
To effectively control cane toads there are two things we all need to do:

1) One or two evenings a week walk around your backyard to look for cane toads and collect by hand; and
2) During the day check any surface water for signs of cane toad eggs, tadpoles or metamorphs.

Contact **KIMBERLEY TOAD BUSTERS** if you find any signs of cane toad breeding in WA.

After five years, Kimberley Toad Busters have found hand collection of cane toads and eradicating cane toad eggs, tadpoles and metamorphs has reduced cane toad numbers and slowed their rate of movement. Toadbusting appears to also be contributing to increased rates of the Lungworm Parasite in cane toads.

The Lungworm Parasite was introduced with the cane toads from South America and does not impact on our native frogs. The Lungworm has already caused reduced cane toad numbers in Queensland. Currently, rates of infection are increasing in the front-line cane toads in WA. Any assistance we can provide nature will help this natural biological control. Kimberley Toad Busters contributes to a range of research projects, we want a cure for cane toads.



Lungworm Parasites in an infected cane toad lung. The parasite is our best biological control for cane toads.

Without community action cane toad rates of up to 2,000 per hectare are expected in the Kimberley.

If you are concerned about cane toads in the Kimberley please write to members of parliament - Prime Minister, State and Local representatives.

Handwritten letters are best.

We need people outside the Kimberley to realise the tragic loss of wildlife that is beginning to occur here, and has already occurred elsewhere in Northern Australia.

WAYS TO MAKE YOUR BACKYARD UNFRIENDLY TO CANE TOADS

1. Limit water sources. Lift water bowls off the ground, ponds should have steep sides with no recess.
2. Limit food sources. Keep outside light use to a minimum as toads are attracted by the insects.
3. Look for cane toads once or twice a week. Toads are most active at night and can often be heard calling. During the day toads can be found in moist places like garden debris, under matting, logs and burrows.

How to 'bust' cane toads

1) Wear gloves.
2) Catch toad by grabbing around mid section behind poison glands.
3) Place in plastic bag or 50 cm high bucket.

How to kill a cane toad

(1) Contact Kimberley Toad Busters. CO_2 is KTB's preferred method of Euthansia.

or

(2) Place toads in a freezer in a plastic bag for 48 hours. Then bury.

or

(3) Take toads to your nearest DPAW, Shire of vet toad drop-box (toads need to be alive).

or

(4) Add 2-3 capfuls of Dettol to a bag of around 10-12 toads. Shake bag and leave for two hours before burying.

Do not hit a cane toad on the head. Cane toad toxin can be squirted into eyes causing temporary blindness, excruciating pain and a trip to hospital.

Cane toads and dogs

Dogs are known to attack cane toads.

SYMPTOMS

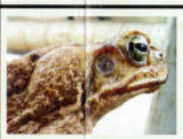
Look for frothing or pawing at the mouth, red gums, fast heart rate, reching, vomiting, stumbling and fitting. This can be followed by death.

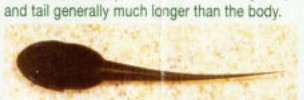
TREATMENT

Hose mouth with water, point hose forward, hold head down, wipe gums with sponge, if fitting wet and fan dog to keep it cool, CALL THE VET, TAKE DOG TO THE VET. Kimberley Vet Centre, Kununurra, 08 9169 1229

NATIVE FROG OR CANE TOAD?

Kimberley Toad Busters' Comparative Chart

Feature	Native Frog Features (generally but with exceptions)	Cane Toad Features
Size	 Giant Burrowing Frog *Cyclorana australis* — Generally smaller than cane toads, up to 11cm long.	 Mature adult larger than most native frogs; average size adult length, nose to tail, 10 - 17.5 cm (at western colonising front).
Habit	 © Dean Goodgame — Little Red Tree Frog *Litoria rubella* — Variety of habits.	 Adults are nocturnal, average activity one night in three or four, but sometimes out consecutive nights. Adults and juviniles cannot jump as high or distance that native frogs jump. Cane toads do not drink but absorb water through its soft belly skin; adults can survive in up to 40% sea water. Will eat almost every animate object they can catch.
Colour, Markings, Appearance	 Giant Burrowing Frog *Cyclorana australis* — Some frogs very similar colouring to cane toads; others have distinct bright colours, stripes.	 Grey, yellowish, olive-brown or reddish-brown backs; bellies are paler with darker mottling.
Skin	 © Paul Doherty — Pale Rocket Frog *Litoria pallida* — Often smoother more slippery skin.	 Away from water, skin on legs and back dry, extremely warty and leather. Males' skin over spine rough, females' spine skin smoother.
Webbing	 Green Tree Frog *Litoria caerula* — Webbing between toes on many frogs; less common between fingers.	  Does not have webbing between front feet fingers; has leathery webbing between toes of hind feet at least half length of toes.
Poison Gland	 All frogs have glands in skin that secrete chemicals; some frogs have venom glands; glands found on various parts of body, including parotid glands on shoulders but not prominent like on cane toad. "Some of the [frog] secretions are toxic, e.g. those of Litoria rubella kills other frogs kept in the same collecting bag" pers. comment Mike Tyler.	  Has obvious large irregular oval - sometimes flat, sometimes bulging - poison gland (on its shoulder area behind the external ear tympanum), which may exude or more rarely squirt poison if squeezed or if the toad is stressed; skin over poison gland has pin pricked appearance; minute poison glands all over skin on cane toad's back.
Posture	 Frog postures commonly hunched and/or crouching; some frogs sometimes sit up proud.	 Commonly, sits high on haunches in proud, dominant posture. Occasionally sits low.
Call	Many varied calls by males.	Males call, females lay pheromone trail; male mating call is long, continuous, single note purring low decibel trill-like sound; see www.canetoads.com.au for male call.
Face, Head Bones	 © Paul Doherty — Marbled Frog *Limnodynastes convexiusculus* — Various appearances	 Distinct bony ridges starting above the eyes and meeting above the top lip in single distinct ridge; laterally directed nostrils.

Feature	Native Frog Features (generally but with exceptions)	Cane Toad Features
Eyes	 Green Tree Frog *Litoria caerulea* — Constricted pupil shape helps identify frog species. Horizontal or vertical constricted pupil? Generally smooth round eye socket.	 Horizontal pupil; not perfectly round eye socket or eye shape. Set in warty bony socket with prominent anterior and supra-orbital crests.
Ears	 External ear (tympanum) on native frogs can be obvious or hard to see, or maybe absent; in photo ear hard to see - just visible under skin fold.	 Has clearly visible dry looking distinct external ear tympanum, see round white opaque disc like feature between eye and poison gland
Fingers and Toes	 May have disc/adhesion pads on toes' tip. Male frogs often have nuptial pads on first and sometimes front foot second finger. Many native frogs do not have discs on fingers or toes. Frogs with toe or finger discs can climb up or cling to vertical surfaces.	 Does NOT have disc or adhesion pads on end of fingers or toes; males have dark nuptial pads on first fingers when breeding (to help grip female in amplexing action). Cannot cling to vertical surface.
Catchability	 Often spring away fast and quickly, and very difficult to catch by hand. Generally more bouncy, quick and flighty than a cane toad. Generally more easily scared than a cane toad.	 CAN catch adult toads more easily because they cannot jump high, fast or far. It has a distinct hopping, relatively slowish gait.
Eggs, breeding cycle	  Single mass, smaller clumps, chains or individually in jelly or foam nests; in water, moist litter or soil or under sand surface. Frogs generally lay 150 to 5,000 eggs at a time depending on species.	 Long strings of gelatinous transparent jelly enclosing double rows of black eggs, which hang off rocks or fringing riparian vegetation. Mature females can lay 35,000 eggs twice a year. Eggs can survive in fresh or brackish water. Breeding sites include ponds, dams, slow flowing shallow streams and billabongs.
Tadpole	 Variety of colours, very few Northern Australian tadpoles are black [down south and east, there are plenty]. Generally have different shape from cane toad tadpoles, and tail generally much longer than the body. 	 Shiny black top and plain dark belly with short thin tail, short stumpy tadpole, disprpportionately large body, length of tail around 1 1/2 times length of body. Will shoal together.
Juvenile	 Juvenile frogs usually similar to adult form. Some frogs have white line on back, similar to juvenile toad.	 A metamorph is transition stage between cane toad tadpole and juvenile.  Juveniles greyer with red warty bumps, can have white line down centre of back. Often have striking dark or red patches on back.

Thank you to frog experts Mike Tyler for his helpful comments and Marion Anstis for her comments and photos of top picture of native frog eggs Notaden melanoscaphus (Northern Spadefoot) and tadpoles Limnodynastes convexiusculus (Marbled Frog)

e-mail: admin@canetoads.com.au
phone: 08 9168 7080

Australian Government — National Landcare Programme
Rangelands NRM Western Australia

Designed and printed by Graphic Source 08 9387 4800

Impact on Wildlife

The main decline in wildlife species occurs during the first arrival of cane toads into a new area. Reducing the number of cane toads with community toad busting efforts will provide native species a better chance of survival and reduce the toad impact on food resources.


© Dean Goodgame

Despite popular belief there has been no recovery of these animals recorded in QLD or NT. Some recovery may occur, however not likely in our lifetime and never to the levels we see today.

Help KIMBERLEY TOAD BUSTERS record and monitor our wildlife by becoming part of **WHAT'S IN YOUR BACKYARD?**.

For more information contact
admin@canetoads.com.au

ICON animal	Impact of Cane Toads	Location in NT
Goannas/Monitors Yellow spotted, Mitchells Mertens , Sand Goanna	90% loss of animals No recovery since 2003	Daly River Manton Dam, Kakadu
Northern Quoll	100% loss of animals	Kakadu
Frilled Neck Lizard	Not well understood, up to 100% loss	Top End
Freshwater crocodiles	77% loss of animals	Victoria River
Northern Blue-Tongue Lizard	100% loss of animals	Fogg Dam
Brown Snake, and other pythons and snakes	Up to 90% loss of animals	NT
Rainbow Bee Eater	30% loss of animals	SE Qld


© Jeff and Sally Thomas

Other animals at risk of extinction include Brush-Tailed Phascogale, Ghost Bats and the 'Pygmy' Freshwater Crocodile. Many other animals will impacted including Night Birds, Water Birds, Freshwater Turtles, eels, crabs and Dingoes. Cane toads consume up to 200 insects per night and have been found to 'eat out' all insects at waterhole before moving on, this impacts the entire Kimberley Food Web.


© Katrina Nissen


© Dean Goodgame